

# What if the Hokey-Pokey (Science) Isn't What It's All About?

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All over our nation, there seems to be a push for education for science. Whether it is the recent studies, the Presidential warnings, or the local contests, we have become aware that the world needs students focused on science. Various studies state that more scientists and engineers are needed each year. Our President has included educational goals in his agenda. Local organizations sponsor more science-related contests and events than ever before. Day in and day out, the push for scientific interest is seen in our schools. Is this push justified? Does the world need more scientists and engineers, or is society lacking something more important than the next technological breakthrough?

Every report seems to say that more scientists and engineers are needed now than ever before. In 2001, the U.S. Department of Labor estimated that the United States will need 1.75 million engineers by 2008 -- a 20 percent increase from the then current number of practicing engineers. The Engineering Workforce Commission found that between 1986 and 1998, the number of students who received bachelor's degrees in engineering declined by 19.8 percent. However, since 1986, there have been a myriad of scientific advances made within our country. The growth of computers and entertainment electronics, the numerous architectural and medicinal discoveries, as well as many more societal benefitting advances made by engineers, has been well beyond what anyone could have expected. It may be time to concentrate on other issues now that the sciences have been so well advanced.

While it can be expected that scientists and engineers themselves would be key participants in the push for science in our society, our government has also jumped on the "Let's Influence Young Minds" bandwagon. In his recent State of the Union address,

President Bush made science and math education one of his main points. He stated, that to be a competitive nation, “we need to encourage children to take more math and science, and to make sure those courses are rigorous enough to compete with other nations.” Bush proposed to training thousands of advanced-placement math and science teachers and bringing more professionals into the classroom. These extra efforts made towards pushing students into math and science would be good, but it is highly possible that other educational areas would suffer as a result. Science can lead us to many goals on the President’s agenda, such as energy research and pollution control, yet there are other issues to be concerned about. Health care research and planning needs focus. The war in Iraq is a major concern, and it seems it would be useful to have students concentrating on other issues to help us out of these times. While more technological and scientific advances would be beneficial, maybe the President should push for students to become involved in conflict resolution or international affairs. Ways to avoid dispute would be much more beneficial to our world than more scientific weapons and chemicals that only increase the ramifications of war. All of these options must be considered by our government before the push for more scientists and engineers is advertised.

The efforts of recent studies and Presidential agendas have made there way down to the local level, truly starting a push for science education in our schools. In New York especially, science and lab requirements become more strict each year. The National Academies’ Research Council reported that a shift in high school lab procedures would help students realize the importance of science education, and cultivate student interest. The council also said that now more than ever, U.S. high

school graduates need a basic

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understanding of science and technology to lead productive lives. What about the basic understanding of human values, morals, economics, government, and history? Did these disciplines fall by the wayside to make room for more scientists and engineers in our world? There are more science-related contests sprinkled into high school education than any other subject. To the Kansas City Business Journal, one engineer stated, "We need more engineers involved in scientific activities with students, and we need to target them at a younger level." Local science organization offer bridge building contests, math competitions, and research-based opportunities. In every elementary and middle school, there takes place an annual science fair, without question. In how many of those schools do you see history competitions or poetry fairs? The push for student focus on science has come down to the local level, and it may be time for schools to begin pushing in the other direction.

Councils, the media, our government, and our schools call out for a return to the studies of science. We need more engineers and scientists in this world! We need another round of nuclear bombs and iPods! Yes, scientists and engineers make gigantic differences in our quality of life and our future, but what about the more human aspect of our world? Do we overlook the moral and values of our children, or the importance of history and language, to succeed even farther in the sciences? Would it be worth it to sacrifice some scientific advances in the next twenty years to concentrate on the quality of our human beings, our world, and the minds that must be nurtured to have success outside of the laboratory? Maybe our world need less science for once, and more of everything else necessary for survival and success. This is something all looking to push science on the next generation must think about.

## Bibliography

“2006 Presidential State of the Union Address.” 31 January 2006.  
<http://www.whitehouse.gov/stateoftheunion/2006/index.html>

Douglas, Scott C. “Does the World Need More Engineers?” 2005 IEEE International Conference. 21 March 2005. [http://www.icassp2005.com/SS\\_P2.asp](http://www.icassp2005.com/SS_P2.asp)

“U.S. High School Science Lab Experiences Often Poor, But Research Points Way to Improvements.” The National Academies. 8 August 2005.  
<http://www4.nationalacademies.org/news.nsf/isbn/0309096715?OpenDocument>

Waterman-Gray, Lisa. “Geeks or not, society faces only an increasing need for engineers.” Kansas City Business Journal. 8 June 2001.  
<http://www.bizjournals.com/kansascity/stories/2001/06/11/focus3.html>